

U. S. Department of Energy



Thomas Jefferson National Accelerator Facility

800 Change Control

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- A. The Change Control process delineated in this section is to be used for requesting, reviewing, and documenting changes to the approved Project Baseline for projects conducted at the Jefferson Laboratory. Baseline changes may occur as a result of contractual modifications, application of undistributed budget, use of contingency/management reserve funds, replanning, or formal reprogramming. Managing changes to the Project Baseline is crucial to ensure the project's work scope, schedule, and cost do not spiral out of control. Changes to baseline documents should be minimized and are normally approved only in the interest of work scope changes, design adequacy, reliability, performance, cost reduction, or safety/environmental considerations.
- B. The purpose of the Change Control process is to ensure that:
- The cost, schedule, and technical impacts of the proposed changes are developed and considered by all appropriate parties.
 - The collected evaluations are considered in the approval or rejection of the proposed changes.
 - All appropriate parties are informed of proposed changes and their dispositions.
 - Baseline documentation is controlled and updated as appropriate to reflect approved changes.
 - Action on proposed changes occurs deliberately, but without undue delay and without interfering disproportionately with project progress.
- C. The stated goals of the Change Control process are:
- To anticipate, recognize, and predict changes to the approved Project Baseline
 - To prevent unauthorized or unintended deviations from the approved Project Baseline
 - To evaluate and understand the technical, schedule, cost and safety/quality assurance impacts of each change to the approved Project Baseline
 - To identify, understand, and control the consequences of changes to the approved Project Baseline
 - To ensure each change is evaluated, reviewed, and dispositioned at the proper authority level

801 Change Control Process

- A. The Change Control process allows the project team to identify, evaluate, approve, and document proposed changes to the Project Baseline. The process is initiated with the generation of a Change Request. The Change

Request is the formal mechanism for proposing and assessing a change, waiver, or deviation to the project. After an evaluation of the Change Request, an approval is granted at an appropriate level and a Change Order is issued to implement the change. The Change Order is expeditiously communicated to affected parties and incorporated in the Project Baseline documentation. The Change Control process is accomplished in three phases: the Request Phase, the Review Phase, and the Documentation Phase. The Request Phase is where the Change Request originates and appropriate classification is determined. For the Review Phase, an assessment of the proposed Change Request is accomplished and approval is obtained from the appropriate authority level. Approved changes are implemented and Project Baseline documents are revised in the Documentation Phase.

- B. During the course of project execution, errors in accounting and cost/schedule databases can occur. Integrity of the Performance Measurement Baseline is vital to a clear understanding of project status. Retroactive changes to the performance measurement data are to be avoided. Adjustments can be made to correct accounting and data entry errors and do not require instituting the formal change request process. Action should be taken promptly when errors are identified and will be controlled by the Office of Project Management (OPM).

801.1 Request Phase

- A. The Change Control process begins with the generation of a Change Request form (Exhibit 26). Any project team member can initiate a change to the project technical, schedule, and cost baselines by completing the Change Request form in electronic format. (Project changes as a result of customer direction, such as a change in funding levels or project scope, are called directed changes. These directed changes will be initiated by the Project Director/Manager and approved by the Project Customer before implementation). The originator fills out the Identification and Description sections of the Change Request and, if possible, completes the Change Impact Assessment section. The Change Impact Assessment section records the potential impacts of the proposed change to the Project Baseline and addresses safety/quality concerns. The impacts of not approving the change are also included. The assessment is to be all-inclusive and thorough to ensure the consequences of implementing (or not implementing) the proposed change are fully understood. The Change Request is then submitted to a member of the project Change Control Board (normally the one most affected) for consideration. Upon concurrence, the Change Control Board member signs the Change Request and identifies the affected Cost Accounts.
- B. After the Change Control Board member has concurred with the Change Request, OPM enters the Change Request into the Change Request Log

(Exhibit 27). Change Requests are numbered sequentially (scheme: FY - sequence #, e.g., 05-001) in order of receipt for tracking purposes. The Change Request Log is updated each time there is a change to the status of a Change Request. When the status of a Change Request is updated, OPM will notify all Associate Project Managers and Cost Account Managers connected with that WBS level and send a notice to each member of the project Change Control Board for informational purposes only. The affected Cost Account Manager will coordinate inputs to the Change Request form and draft a revised Cost Sheet and Cost Account Plan reflecting impacts due to the proposed change.

- D. At this stage in the process, the OPM Manager reviews the classification level assigned by the Cost Account Manager and, if he concurs, updates the Change Request Log. OPM also produces the Change Request Summary Report (Exhibit 28). For Class 1-2 and Class 3 Change Requests (see the next section for Class definitions), OPM distributes the Change Request to members of the Change Control Board. The Change Request is placed on the agenda for the next board meeting. The Change Request then enters the Review Phase of the Change Control process.

801.2 Review Phase

- A. The Review Phase is dictated by the Classification level of the Change Request. Changes are classified according to the extent that they impact the Project Baseline. The Classification and Approval Authority levels are determined by use of the criteria listed in Exhibit 29.
- B. Class 1-2 Change Request: This classification of Change Request requires the approval of the Project Customer. The Change Control Board evaluates the Change Request and provides a recommendation to the Project Director/Manager. The Project Director/Manager reviews the Change Request before forwarding to the customer for approval which may include a Baseline Change Control Board. After receiving the customer approval, the Project Director/Manager reviews the action directed by the customer. OPM updates the Change Request Log and the Change Request process enters into the Documentation Phase.
- C. Class 3 Change Request: This classification of Change Request requires the approval of the Project Director/Manager. The Change Control Board evaluates the Change Request and provides a recommendation to the Project Director/Manager. The Project Director/Manager approves the Change Request and OPM updates the Change Request Log. The Change Request process then enters into the Documentation Phase.

- D. Class 4 Change Request: This classification of Change Request requires the approval of the Associate Project Manager. Once OPM concurs with the Classification level, the Change Request goes to the Associate Project Manager for approval. After approval, OPM updates the Change Request Log and the Change Request process enters into the Documentation Phase.
- E. Class 5 Change Request: This classification of Change Request only requires the approval of the Cost Account Manager. Once OPM concurs with the Classification level, the Change Request goes to the Cost Account Manager for approval. After approval, OPM updates the Change Request Log and the Change Request process enters into the Documentation Phase.
- F. During the review process, any disapproved Change Request is sent back to the affected Cost Account Manager who will consult with the originator for determining any further action.

801.3 Documentation Phase

- A. The Documentation Phase is where the Project Baseline is revised and the approved change is implemented. Once the Change Request documents have been signed by the proper level of authority, OPM issues a Change Order. For changes to the project's technical design or scope, the Associate Project Manager is responsible for ensuring the relevant technical documentation is revised to reflect the change. OPM is responsible for revising cost/schedule baseline documents for changes impacting these project baselines.
- B. The Associate Project Manager also approves the revised Cost Account Plans. OPM reviews the Cost Account Plan and forwards them to the Project Director/Manager for review. The Project Director/Manager is the final approval authority for the revised Cost Account Plan. Once the Cost Account Plans are approved, OPM updates the Change Request Log and sends the Cost Account Plans to the appropriate Cost Account Manager for implementation.

802 Exhibits

- 26. Change Request Form
- 27. Change Request Log
- 28. Change Request Summary Report
- 29. Change Request Classifications



Exhibit 26. Change Request Form

Change Request Form

Project Name

Identification

Change Request # (OPM will fill in.)	Title	
WBS #	Date (m/d/yy)	Date Required (m/d/yy)
Originator Name		
Item Name		Drawing/Spec #
Vendor Name		Purchase Order #

Status

Change Request Status (Drop Down List) New

Description and Justification

Description of Proposed Change	
Justification of Proposed Change	
Change Control Board Member Concurrence	Impact Assessment Assigned To



Change Impact Assessment

Technical Impacts
Name(s)
Schedule Impacts
Name(s)
Cost Impacts
Name(s)
Quality/Safety Impacts
Name(s)

Classification Level

Classification (Drop Down List) Class 1	
Cost Account Manager	Associate Project Manager
OPM Approval	



Recommendation and Disposition

Change Control Board Review (if required)

CCB	Date (m/d/yy)
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Final Approval

Class 5

Cost Account Manager	Date (m/d/yy)
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Class 4

Associate Project Manager	Date (m/d/yy)
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Class 3

Project Director/Manager	Date (m/d/yy)
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Class 1-2

Project Customer	Date (m/d/yy)
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Continuation Page



**Instructions
for
Change Request Form**

(**Note:** Use the Continuation Page on last page of the Change Request form if more space is required. Label with section reference for any input to this page.)

Project Name: Self-explanatory.

Change Request #: This number will be filled in by OPM. The forms will be numbered consecutively as they are received and will be entered into the Change Request Log.

Title: A brief descriptive title.

WBS #: Work Breakdown Structure Number(s) affected by the change.

Date: Originator enters the date for the submission of the Change Request.

Date Required: Originator enters the estimated date approval is needed to avoid adverse impacts on technical performance, schedule, cost or quality/safety.

Originator Name: Name of individual submitting the Change Request.

Item Name: Enter name of item or procedure (component, subassembly, assembly, system, test, etc.) to be changed.

Drawing/ Spec #: The drawing/specification number(s) of the drawing/specification (s) affected by the change.

Vendor Name: If the item has been purchased, or a subcontract issued, enter the vendor's name(s) here.

Purchase Order #: If a purchase order(s) has been issued for the item, enter the number(s) here.

Change Request Status: This field in the Change Request form is a drop-down list (New / Open / Deferred / Duplicate / Approved / Disapproved). OPM will update the status of the Change Request as it progresses through the procedure.

Description of Proposed Change: Describe the change requested. Use the continuation page, as required.



Justification for Proposed Change: Justify the proposed change. Describe the problem or defect that will be corrected by the proposed change. Indicate the experience that dictates the need for the change. Summarize the capability to make the change. Use the continuation page, as required.

Change Control Board Member Concurrence: The Change Control Board member who concurs with the proposed change signs this block.

Impact Assessment Assigned To: The individual assigned to coordinate inputs to the Change Impact Assessment section of the Change Request is identified in this block.

Change Impact Assessment: Provide a statement of impact to technical performance, schedule, cost, quality/safety, and environment. Include the impact if the change is not approved. Use the continuation page, as required.

Name(s): Add the names of individual(s) who contributed and concurred to the pertinent assessment section.

Classification Level: The Classification field in the Change Request form is a drop-down list. Select Class 1, 2, 3, 4, or 5. The Cost Account Manager, Associate Project Manager, and OPM sign in the appropriate block.

Recommendation and Disposition: Recommendations and decisions concerning the Change Request are documented in this section. Use the continuation page, as required.

(Baseline) Change Control Board Review: The board chairman signs this block after review and recommendation by the board.

Final Approval: Based on the Change Request classification, OPM will select the appropriate signature blocks.

Exhibit 27. Change Request Log

[illegible]

Exhibit 28. Change Request Summary Report


 Change Request Summary Report (Project Name)							
Classification	New	Open	Deferred	Duplicate	Approved	Disapproved	Total
1-2							
3							
4							
5							
Total							
%							

Exhibit 29. Change Request Classifications

Classification*	Class 1-2	Class 3	Class 4	Class 5
Approval Authority	Project Customer Approval Required	Project Director/Manager Approval Required	Assoc Project Manager Approval Required	Cost Account Manager Approval Required
Technical Work Scope	Changes to work scope or performance requirements specified by the customer or included in the Mission Need approved by the customer	Changes to work scope or performance requirements that affect multiple APMs, but do not require customer approval	Changes to work scope or performance requirements that affect multiple CAMs, but do not affect other APMs	Changes to work scope or performance requirements that do not affect other CAMS
Schedule/ Milestones	Changes to Level 1-2 milestones that are under customer control	Changes to Level 3 milestones	Changes to Level 4 milestones	Changes to Level 5 milestones
Cost	Changes to the customer-approved Project Budget Base (TPC & TEC)	Changes that involve a transfer of work scope and its associated budget between APMs	Changes that affect multiple CAMs, do not affect other APMs	Changes that do not affect other CAMs

*** Unless superseded by the Project Execution Plan**